

METHOD OF OPERATION  
SIGNAL CIRCUIT

Buzzer And Sounder Equipment - Local Test Desk - Full Mechanical Power Driven System.

GENERAL DESCRIPTION

1. This circuit is used to provide an audible signal in connection with the testing cord at a local test desk so that an immediate test can be made when conditions change on the line to which the testing cord is connected.

2. A trouble tone, superimposed on battery, is connected to the ring, or on ground to the tip of the test cord as an indication to another testing operator, that the line is already under test, should it be selected on a no test basis.

DETAILED DESCRIPTION

OPERATION

FIGURE 1

3. When the associated test cord is connected to the line under test and the sounder key associated with the test cord operated, the SR relay operates if the line under test is short circuited or the ring side of the line grounded. If the trouble is due to a swinging ground or across, the SR relay operates and releases in unison with the trouble, closing a circuit through the S sounder thereby giving an audible signal to the test desk attendant. Trouble tone is superimposed on the battery which operates the BR relay.

FIGURE 2

4. The operation is the same as that described under Figure 1. Trouble tone is connected to the tip of the line instead of to the ring.

FIGURE 3

5. When the associated test cord is connected to the line under test and the buzzer key associated with the test cord operated, the relay operates, if the line under test is short circuited or the ring side of the line grounded. A key is provided for transferring the circuit through the buzzer from the make, to the break contact of the BR relay. When this key is operated, the buzzer is silenced, but re-operates when the BR relay releases either because of the trouble being cleared or the test cord being disconnected from the line under test. The buzzer is again silenced when the key is restored to normal. Trouble tone is connected to the tip of the line.

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CIRCUIT REQUIREMENTS

|                         | <u>OPERATE</u>  | <u>NON-OPERATE</u> | <u>RELEASE</u>                       |
|-------------------------|---|--------------------|--------------------------------------|
| B97<br>(SR)             | Test .0043 amp.<br>Readj. .004 amp.   |                    | Test .0024 amp.<br>Readj. .0026 amp. |
| B99<br>(BR)             | Test .0048 amp.<br>Readj. .0045 amp.  |                    | Test .0023 amp.<br>Readj. .0025 amp. |
| 12521<br>Sounder<br>(S) | The air gap between the<br>armature and cores, with<br>the lever down, shall be<br>.005" minimum. The sounder<br>shall be adjusted to oper-<br>ate on .065 amp. and not<br>stick on .250 amp. |                    |                                      |

ENG.--PLM-VL.  
1-11-22.

CHK'D.--ASP.

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